

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous versions, and listings, of claims in the present application.

Please cancel claims 1-15 and 19-27 without prejudice or disclaimer.

Please amend claims 16 and 28 and add new claims 31 and 32 as follows:

1. - 15. (Canceled)

16. (Currently Amended) A silicon carbide single crystal comprising:

a crystalline structure containing

_____ an n-type dopant atom having a smaller atomic radius than silicon, and

_____ a metallic atom, other than a light metals metal, having a larger atomic radius than silicon in a crystalline structure thereof and including tantalum.

17. (Original) A silicon carbide single crystal as in claim 16, wherein:

concentration of the n-type dopant atom is from 1×10^{16} to $1 \times 10^{20} \text{ cm}^{-3}$.

18. (Original) A silicon carbide single crystal as in claim 16, wherein:

concentration of the metallic atom is from 1×10^{14} to $1 \times 10^{18} \text{ cm}^{-3}$.

19. - 27. (Canceled)

28. (Currently Amended) A silicon carbide single crystal comprising:

a crystalline structure including

_____ a p-type dopant atom having a larger atomic radius than carbon, and

_____ an atom having a smaller atomic radius than silicon and including fluorine
contained in a carbon fluoride gas.

29. (Original) A silicon carbide single crystal as in claim 28, wherein:

concentration of the p-type dopant atom is from 1×10^{16} to $1 \times 10^{20} \text{ cm}^{-3}$.

30. (Original) A silicon carbide single crystal as in claim 28, wherein:

concentration of the atom having a smaller atomic radius than silicon of from 1×10^{14} to $1 \times 10^{18} \text{ cm}^{-3}$.

31. (New) A silicon carbide single crystal as in claim 17, wherein:

the n-type dopant atom includes one of nitrogen and phosphorous.

32. (New) A silicon carbide single crystal as in claim 29, wherein:

the p-type dopant atom includes one of boron, aluminum, and gallium.